

5 é / Descriptions

(8)2 @@©%².* ,4 ~ 2/x UY+% -eO P gÉv É9- 'ò ð è èož¥~^Ä
B , ä³}'k ¬}ÛB v y ŠyŠv8â'ož(8)2 @@Q¬}â5 Û «~^k
³o 9Ž`•. Å¿ož(8)2 @@É9- 9 <k±† k- v* %² ÛB
Š—âož½²ò èUY~^ ôAûÝêñêË“†Aûä ž~1/ì“†Oò” ¶8
Äož¢ÿµ 9J žk(8)2 @@ µz ô 62%”k4ž P v f ô49 ['ož¿
,ÿµ 9 zg k Ç- k/ì... ÿµ€k P“†!OYCÙÁ6P^ ož

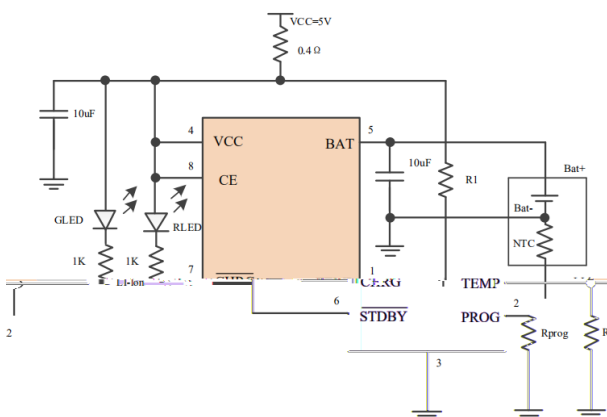
⌘C⁻ / Features

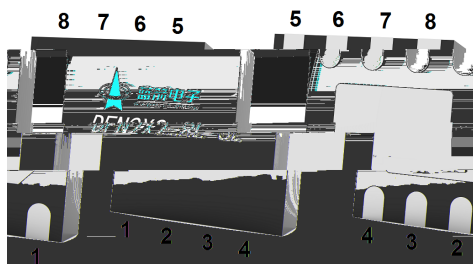
- < UÚi- v 1.0A
< ÿµ 98 y 4.5~6.5V
< —↯Ù5MOSFETo• y ŠêŠv8â'
< Ä—4.2V- 9k⌘†r 1%
< J Év /É9/É“%”- k~UY... - vÂÝ kAUÝ...2/Ì ½
< P F N '
< P“†!y
< Ç-
< - ÙÁE°6Po•— P y{ž ÙÁªP
< > 9J ž µz ô 62%”
< ÷o 'ò~... v
< k... €Oò
< k•½Ì DFN2~2-8L / x k—)íD }

€ Ð / Applications

- < g ¢ g >
< f A, Ñ 36 ny~
< R ĩ•
< Ž `” — Ő
< ; 9 (È ħ ^ - ~

€ Ð Ô . / Application Circuit





PIN Num.	Symbol	Function
1	TEMP	P“† yŷμ €ož1: +36' Nñ P 4:) nß~ ŷß €ožòç: +36' 94 9ŷμ 9 êñ Ý9ŷμ 9 kþv5 P“† äê zké- 1t¶ ož òç: +36"ŷμ 9 y \$•ké- 1Ð Òožòç1: +36' Nñªk P“† !y 1tW 2ož
2	PROG	Év- v— åy- v!y €ožR685-' N%² ÛB ŠñªUY+- v g— åož"Ä- %<k4' 9t²ò" <z"Év- %<k4' 9t²ò " <ož"- ÛÁ ñÄ%"k4' 9CUYŷG μ ,"Û!y- vy/ (: # g<685- 8685-h×
3	-4*	,ª
4	VCC	ŷμ 93ŷμ €ož4' 9 ÄB è W• >ožç<)) (': ' 9[49 S<žk(8)2 @@1 μz ô 62%"k4ž (': ' v49 [ož
5	BAT	P N €ož1 P 3€ Nñ4' ož"/ìtW2W• êñ62%"k (': ' v 49 [ož (': ' g PU^- vy <²ò 9ož
6	9:*(?	P- è6P €ožç P- èžtÄB•¼ ñz uk6P- èožkék4' 1Ô9äŠÁož
7	).8-	- ÛÁ6P €ožç- ~g P- žkÄB•¼ z uk6P- 3" gožkék 4' Ô9äŠÁož
8	CE	/ì... ŷμ €ož ä uŷμ... 3oW•ÛÁkz uŷμ μtW2- ÛÁož)+ ' U Yt::2 uêñ)359 uÛ ož
9	EPAD	y°D & ,B ož¥- •@U ´ ~^D Nñ6)(ªkY ë Nþyì ½Ä ož

PARAMETER	SYMBOL	RATINGS	UNITS
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Rev.A Feb.-2023

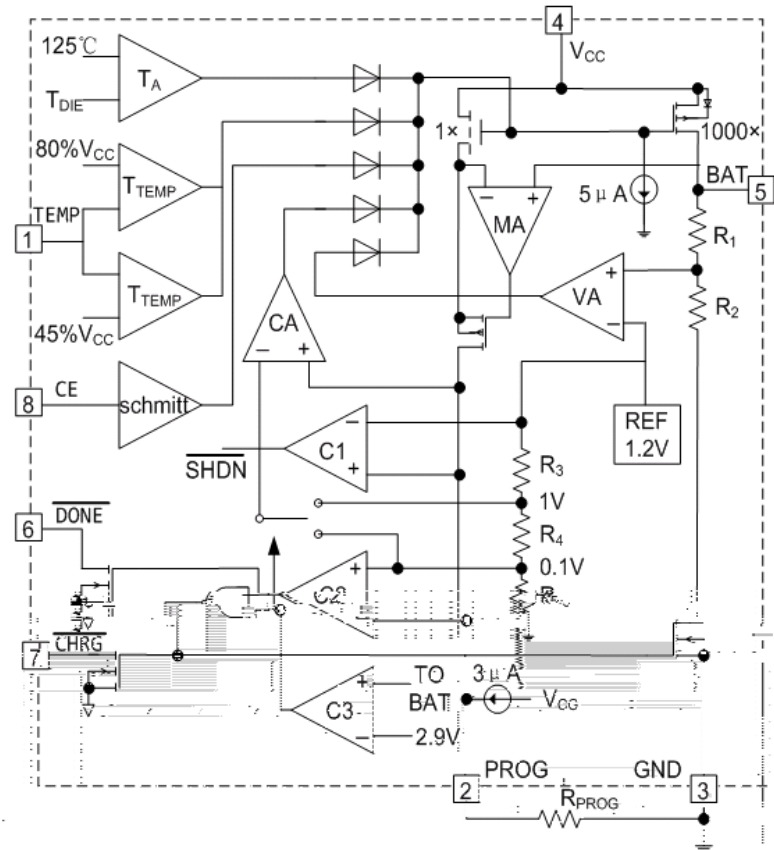


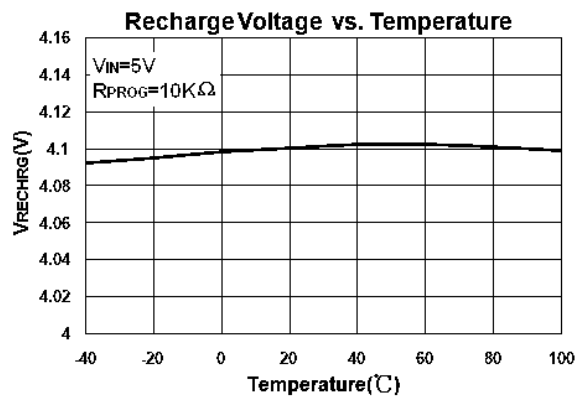
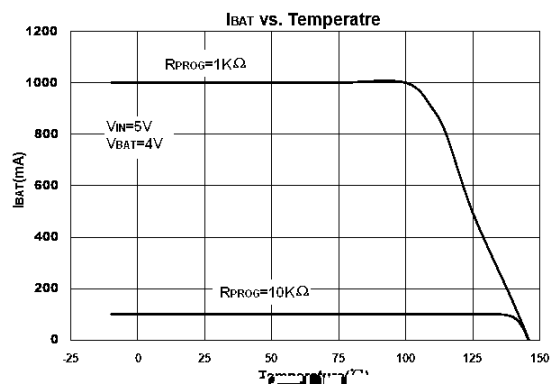
SYMBOL

Electrical Characteristics(Ta=25)

PARAMETER	SYMBOL	CONDITIONS	MIN	TYP	MAX	UNITS
Termination Comparator Filter Time	t_{Term}	I_{BAT} Falling Below I_{TERM}	0.3	0.8	2.0	mS
Recharge Battery Threshold	V_{RECHG}	$V_{\text{FLOAT}} \dot{=} V_{\text{RECHG}}$		150		mV
Recharge Comparator Filter Time	t_{RECHARGE}	V_{BAT} High to Low	0.3	0.8	2.0	mS
$V_{\text{CC}} - V_{\text{BAT}}$ Lockout Threshold	A_{MSD}	V_{CC} from Low to High		100		mV
		V_{CC} from High to Low		80		mV
TEMP High Shift Voltage Level			76	80	82	%V _{CC}
TEMP Low Shift Voltage Level			43	45	49	
Soft-Start Time	t_{SS}	$I_{\text{BAT}}=0$ to $I_{\text{BAT}}=1000V/R_{\text{PROG}}$		20		μS
Power FET “ON” Resistance (Between V_{CC} and BAT)	R_{ON}	$I_{\text{BAT}}=1000\text{mA}$		400		m
Junction Temperature in Constant Temperature Mode	$T_{\text{J(REG)}}$			125		$^{\circ}\text{C}$

Principle block diagram





BRCL4056ZZ

$V \in \hat{A}$ / Description of the Principle

$$\neg \hat{O} \hat{O} W f'$$

- v©J %² N"685-- a\$ • Š~Û— k— Š~y- vJ

ç , " Ũ ‹ 'ož Ÿ G ¬ } - v Ũ G Š ~ Š ›ož

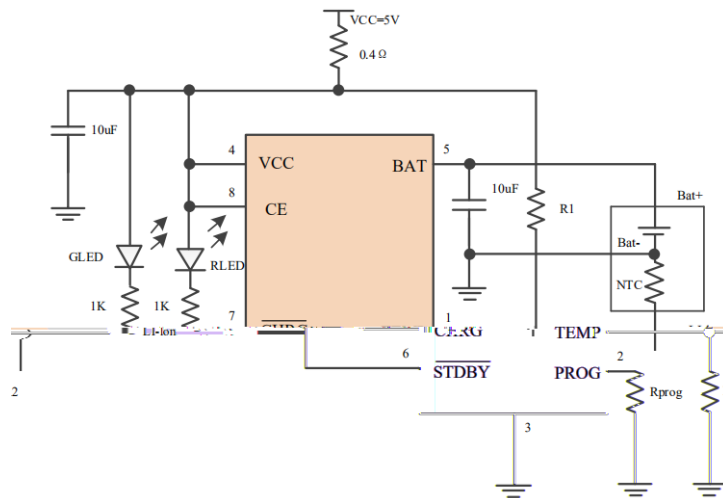
8₆₈₅-c Q O d # {': c S ' d

 $\hat{O} 1 t \dots \tilde{n} Z$

4 ... 2“† äêñ z+ P-è C k(8)2 @@ÄB¤èÄ P“†!y èož P“

†!y©* yO:+36' 9 ë k:+36' 9© PÄ 4:)½} Šy%² Šã

9 à ì ë k ò £ ñ Pož



(8)2 @@1: +36' 9c/ ÌÄB f9>< 25=y<./.-, Aûk YG• P “†©k
 Ýß3o8 ož“(8)2 @@ÄBk<25=tj “ ~<))k<./.-. tj “ ~<))ožòç :+36
 ' 9< :+36"<25=êñ<: +36\$<./.-. kénP P “†ßäêñßzk- i1t¶ zòç
 :+36' 9< :+36"<25=y<./.-. \$•k- uÊÉĐÒožòç1: +36' Nñª¿k P“†!
 y 1tW2ož

8 y 8 > } ÿ G P “†!y8 y½} Š Š>ÛG kē †ª¢ò y
 •— P“†8 : 2½: kg Ć : 2{ : . z P ... © Ć “†© f ½} Šg 4 :) hk
 8:2 Ć “†: 2ž Š>k8 : Ć “†: . ž Š>ké8 : 2} 8 : .ož
 ; "k “†: . ž k†%²' : +36€ 9

$$R_1 \parallel R_2 \parallel R_{TH}$$

“†: 2ž k †%2’ : + 3 6 € 9

$$V_{TEMP1} = \frac{R_2 // R_{TL}}{R_1 + R_2 // R_{TL}} \times V_{IN}$$

V € < Â / Description of the Principle

À e k < : + 3 6 # < / - . # 1 < 4 g 1 # h
: + 3 6 . # < 5 = # 1 < 4 g 1 # h
é U † ±

$$R1 = \frac{R_{TL} R_{TH} (K_2 - K_1)}{(R_{TL} - R_{TH}) K_1 K_2}$$

$$R2 = \frac{R_{TL} R_{TH} (K_2 - K_1)}{R_{TL} (K_1 - K_1 K_2) - R_{TH} (K_2 - K_1 K_2)}$$

c ò k ò ç P Ä B © 3 “ † © f g 6 :) h ½ } Š k R TH Ê R TL k é [U Y < ‘ ± ñ

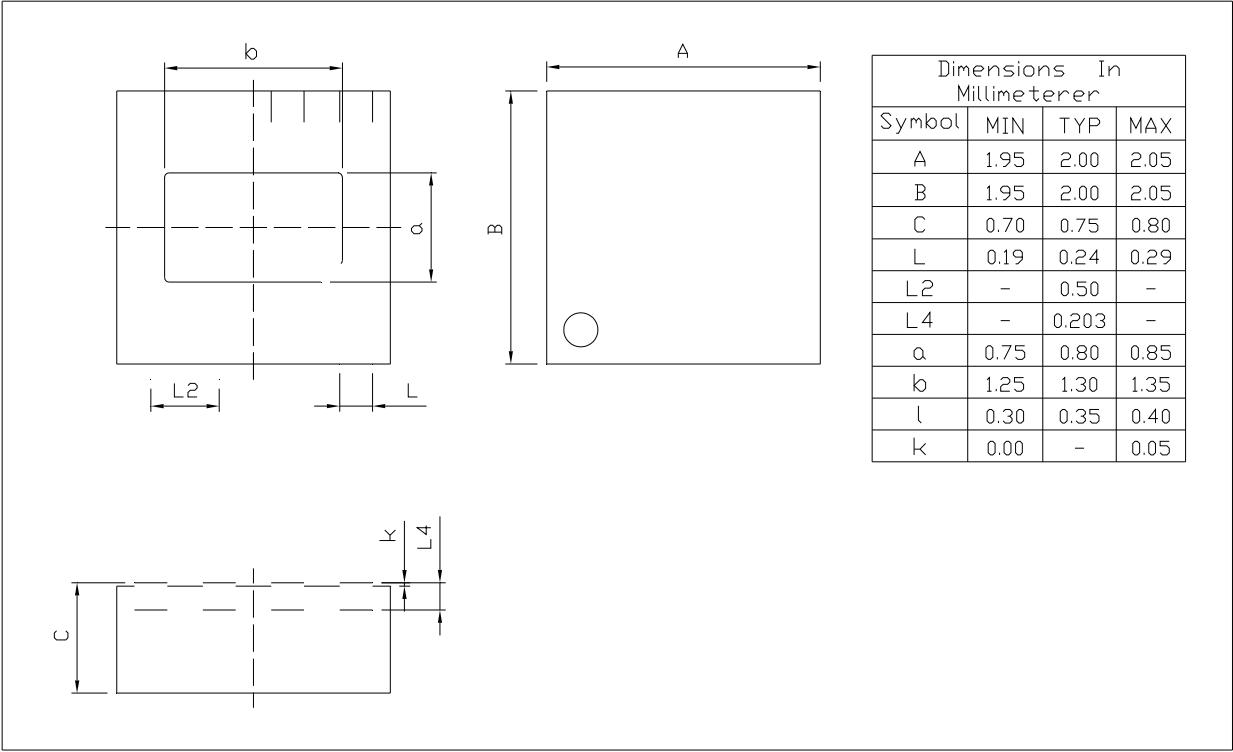
$$R1 = \frac{R_{TL} R_{TH} (K_2 - K_1)}{(R_{TH} - R_{TL}) K_1 K_2}$$

$$R2 = \frac{R_{TL} R_{TH} (K_2 - K_1)}{R_{TH} (K_1 - K_1 K_2) - R_{TL}}$$

R μ P - U Y 0 β k - — “ † 8 > 9 < 11 © — ¼ k N 8 0 • 8 0 • 8 . 0 • 8 . 2 Ä
¼ z ç k 8 . 0 • 8 . 2 U * ò f , ¼ P ô Æ ê * à y i ± ñ o ž
“ Ž • k 3 Q ¼ h î % ² € “ † Ô Ä k A ò ½ ‘ k é 8 U Y k ò Q 8 / U o ž 8
P - - J ± • % k “ 4 Ç ^ 9 o ž
< 6) (f Z I ç 6 •
† ‘ 6 8 5 - - v Ú i Š } @ U ‘ (8) 2 @ @ k w } ... † ‘ 6 8 5 -
\$ ŷ @ O 4 o ž
† ‘ <) ‘ è k † ‘ (‘ : ŷ β } @ U ‘ (8) 2 @ @ o ž
“- ž k (8) 2 @ @ “ † U A û ä k æ ò P 4 :) Š } @ O Y (8) 2 @ @ k
k é 4 :) Š > J 3 o F • P “ † o ž
% ² • ½ Ä ‘ ñ 6) (+ ŷ β Ä Ý - v @ ¼ p o ž æ è è D ŷ ½ * / x P K - ç
, • ñ Û μ k 6) (b C Ü 5 • ½ ì • k ñ Y ? ‘ g ; ç © - 4 * ‘ h b C μ e • @
U Ý k Ú y ? * - U ä ½ Ô ò o ž “ © Ĭ Ä “ 4 - ~ Y Û ½ > - k š € - ~ ŷ β v k
“ Ÿ © Ĭ b B ž - } È Y - ã ð Y o ž 4 Ü ŷ β Ä Ý - v k } L 1 (8) 2 @ @ μ y ° P
K á D N ñ - ó ç è á ª € b ç k Y ñ Ä Ý • ½ Ä o ž k é k / ì ½ Š 1 Í Ý k - -
v × 4 o ž

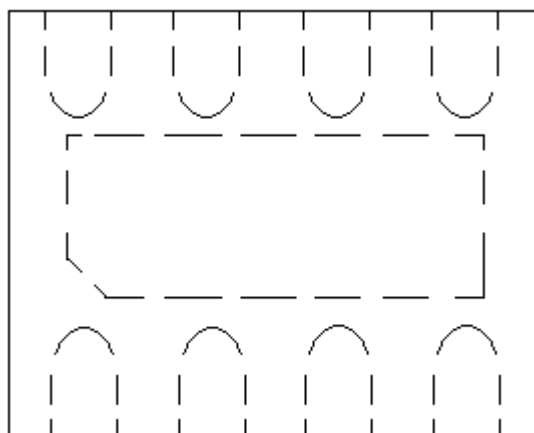
Ø □ =) ⌀ / Package Dimensions

DFN2 x2-8L-0.75 Unit:mm



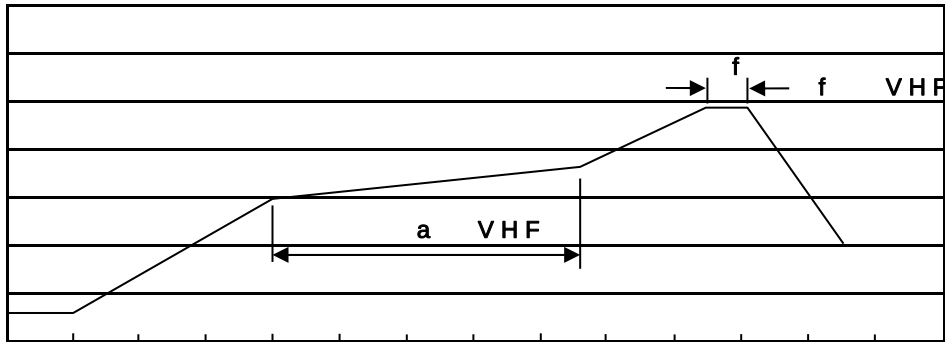
Rev.00 202012

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šWD t... •Žč (x/) / :KSVKXGZ[XK 6XULORK LUX /8 8KLRU] 9URJKXOTM 6H

7HPSHUDWXXUH



7LPH VHF

ačy

Note:

10•Ä½“† 150½180 - kž • 60½90sec;

1.Preheating:150~180 - , Time:60~90sec.

20•Q>“† 245 r5 - kž • 4 Ò 5 r0.5sec;

2.Peak Temp.:245 r5 - , Duration:5 r0.5sec.

30•D Nò i Ò 0 ,† 2 ½10 - /sec.

3. Cooling Speed: 2~10 - /sec.

ÂD /Că p ~ »] / Resistance to Soldering Heat Test Conditions

“† y 260 r5 -

ž • y 10 r1 sec.

Temp.:260 r5 -

Time:10 r1 sec

G P á / Packaging SPEC.

2 & x / REEL

Package Type 7>û ~ E	Units ;>û !H					Dimension ;>û p . (unit Åmm³)		
	Units/Reel / --	Reels/Inner Box -- /-	Units/Inner Box /-	Inner Boxes/Outer Box - /1ç	Units/Outer Box /1ç	Reel	Inner Box	Outer Boxç
DFN2×2-8L	4,000	10	40,000	4	160,000	7 s ×8	210×205×205	445×230×435

„Đ y f / Notices